

## Protection from hepatic ischemia and improvement of liver regeneration by *Thuja orientalis*

**Alok Kumar Dash**

V B S P University, India

**L**iver is a vital organ performing wider range of functions; Oxidative damage is implicated in the pathogenesis of various liver disorders. Present study was aimed at evaluating protective ability of *Thuja orientalis* Linn. against thioacetamide induced hepatotoxicity in rats. *Thuja orientalis* has been used in ayurvedic medicine for the treatment of various disorders. *Thuja orientalis* has the biological capabilities of detoxication, antioxidation and antiinfection. In this study, we evaluated the antihepatotoxic effect of *Thuja orientalis* aqueous and petroleum ether extract on the thioacetamide induced liver injury in a rat model. Hepatic damage, as revealed by histology and the increased activities of serum aspartate aminotransferase (AST), alanine aminotransferase (ALT), alkaline phosphatase (ALP) activities and decreased levels of serum total protein (TP), albumin (Alb) and globulin (G) were induced in rats by an administration of 50 mg/kg thioacetamide was injected intraperitoneally (i.p). *Thuja orientalis* extract significantly inhibited the elevated AST, ALP and ALT activities and the decreased TP, Alb and G levels caused by thioacetamide intoxication. From this study, it can be concluded that the aqueous and petroleum

ether extracts of *Thuja orientalis* possesses effective hepatoprotective activity.

### Biography

Alok Kumar Dash received his B. Pharm from IGIPS, M. Pharma from KMIPS and PhD Degree from Suresh Gyan Vihar University, Jaipur, Rajasthan, India. He is working as an Assistant Professor in Institute of Pharmacy, Veer Bahadur Singh Purvanchal University, U.P, India. His field of research focuses is on natural products chemistry, pharmacognosy, pharmacological screening and standardization method development for herbals. He has more than 40 national and international publications and two patents to his credit. He is having 10 years of experience in research and teaching. His biography is published in Asian Admirable Achievers (volume ninth) 2016. He is recipient of most coveted institutional and globally reputed Rashtriya Gaurav Award 2017. His profile is selected for Bharat Vikas Award. He is recipient of "Certificate of Excellence in Reviewing-2017" by European Journal of Medicinal Plant, Science Domain International and has been serving as an Editorial Board Member of International Journal of Modern Botany, Scientific and Academic Publishing, Asian Journal of Chemical Sciences, BMC Complementary and Alternative Medicine, Bioequivalence and Bioavailability International Journal, British Journal of Pharmaceutical research and many more.